

**c e c**  
Environmental

5335 Wisconsin Avenue, NW  
Suite 440  
Washington, DC 20015  
202-895-1710 (phone)  
202-895-1700 (fax)  
[www.cecenvironmental.com](http://www.cecenvironmental.com)  
[info@cecenvironmental.com](mailto:info@cecenvironmental.com)

May 23, 2008

Mr. Bernard Guzman  
Project Manager  
Government of the District of Columbia  
Office of the Deputy Mayor for Planning and Economic Development  
The John A. Wilson Building  
1350 Pennsylvania Avenue, NW  
Suite 317  
Washington, DC 20004

Re: Solicitation No.: DCEB-DMPED-08-RFQ-ECS-91813-01  
Subsurface Investigation at: **5201 Hayes Street, NE**  
**Washington, DC 20019**

Dear Mr. Guzman:

## 1.0 INTRODUCTION

CEC Environmental, Inc. was retained by The District of Columbia, Office of the Deputy Mayor for Planning and Economic Development to conduct an additional subsurface investigation at the above referenced site. The additional subsurface investigation was performed to further delineate contamination discovered during a July 2007 Phase II Environmental Site Assessment conducted by ECC.

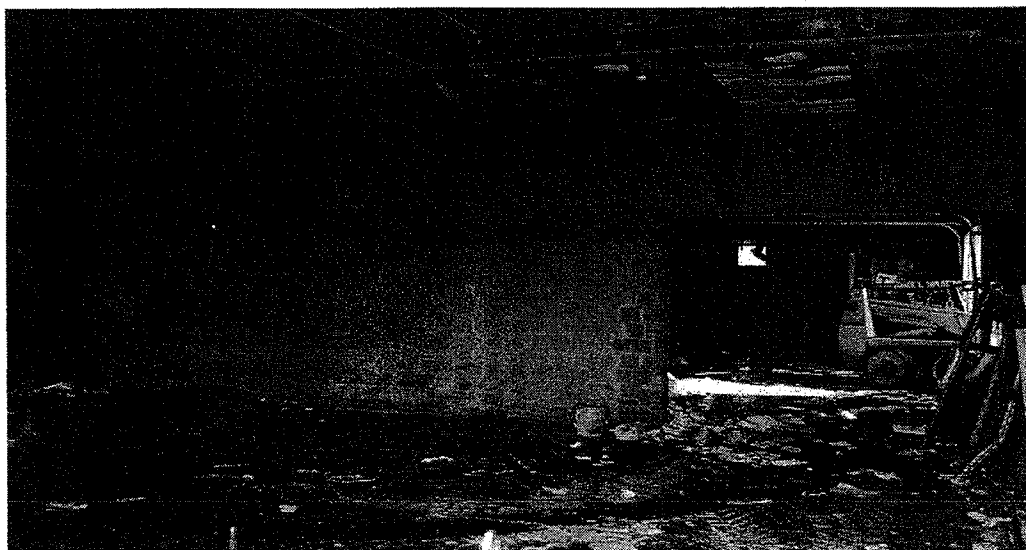
The Site is located on the south side of Hayes Street, N.E., approximately 200 feet west of its intersection with Division Avenue, N.E., in the Deanwood neighborhood of northeast Washington, D.C. The Site is located at approximately 38° 53' 57" North latitude and 76° 55' 35" West longitude. The Site is identified as Lot 809 on D.C. Square 5197.

The Site occupies 93,540 square feet (approximately 2.1 acres) and is improved with an approximately 34,000 square foot building used as a bulk trash and recyclable material (e.g., glass, paper, plastic, wood, and metal) sorting facility. The site structure is located on the east-central portion of the property; the remainder of the site consists of asphalt and concrete pavement, with thick brush located on the western and northern property boundaries. The site structure is one story and is situated on a concrete slab foundation. The majority of the structure consists of areas for sorting and storing trash and recyclable materials.

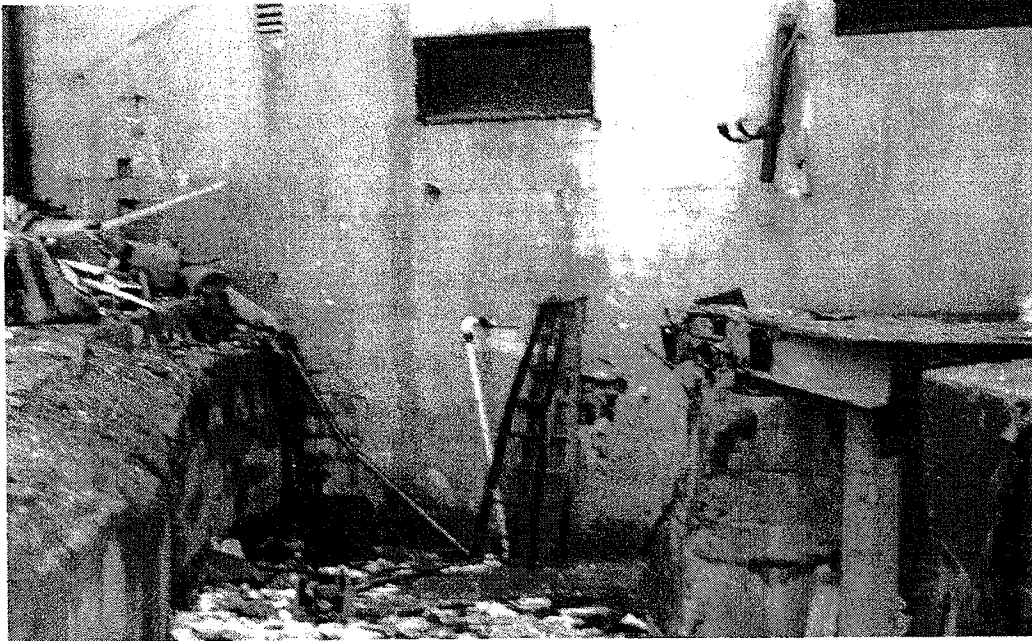
### **3.0 PHOTOGRAPHS OF SUBJECT PROPERTY AND SURROUNDING AREAS**



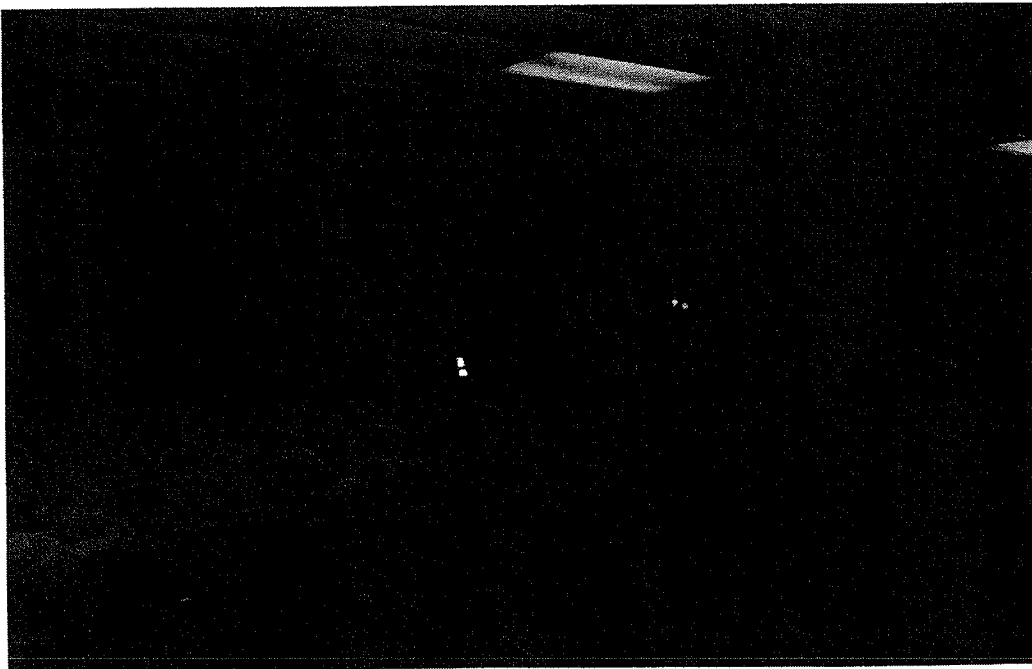
**Side View of Subject Property**



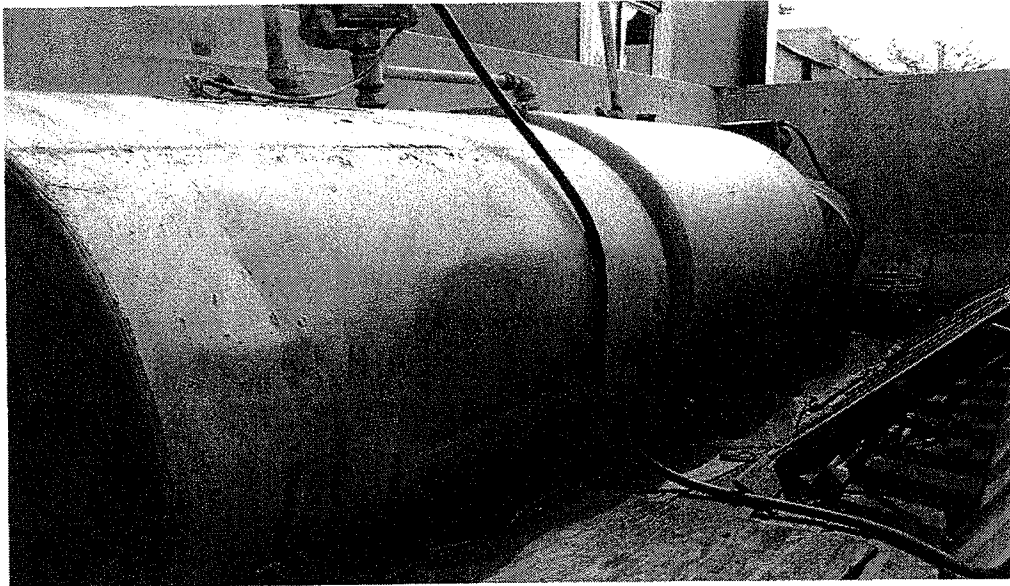
**Internal View of Subject Property**



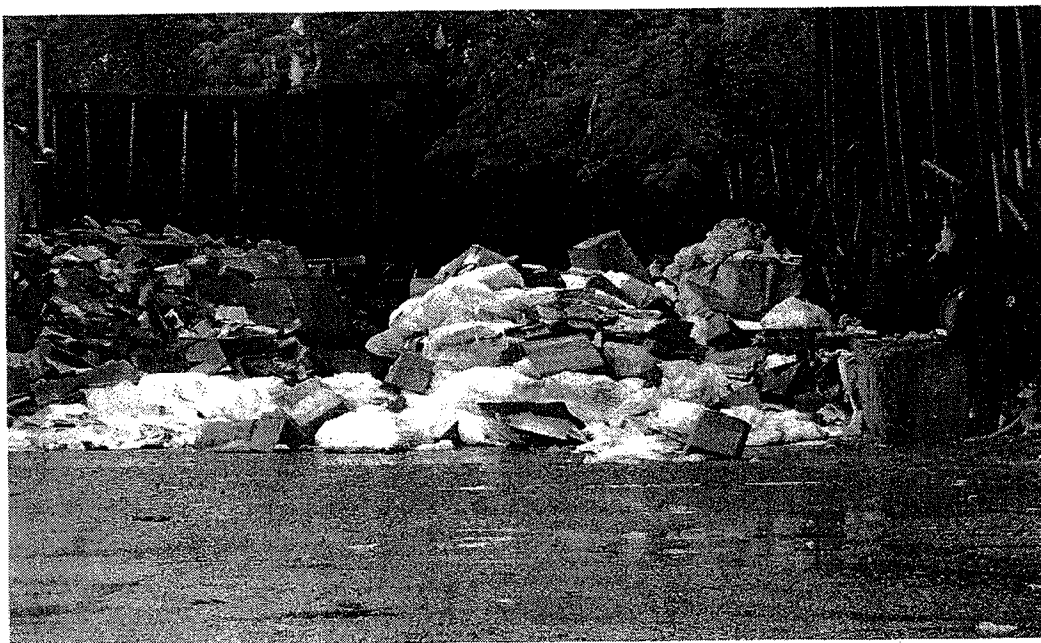
**Side View of Subject Property**



**Internal View of Subject Property**



**2-500 gallon (Diesel Fuel) and 1- 300 gallon (Used Oil) Aboveground Storage Tank**



**View of Non-Hazardous Trash Collection**



**View of Soil Sampling**

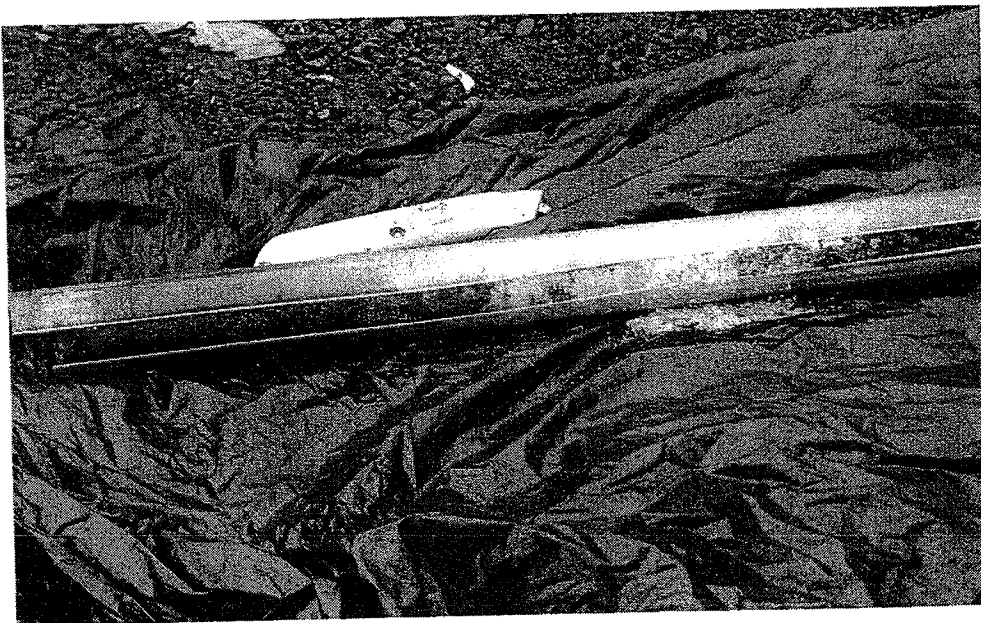


**Soil Sampling (Geoprobe)**

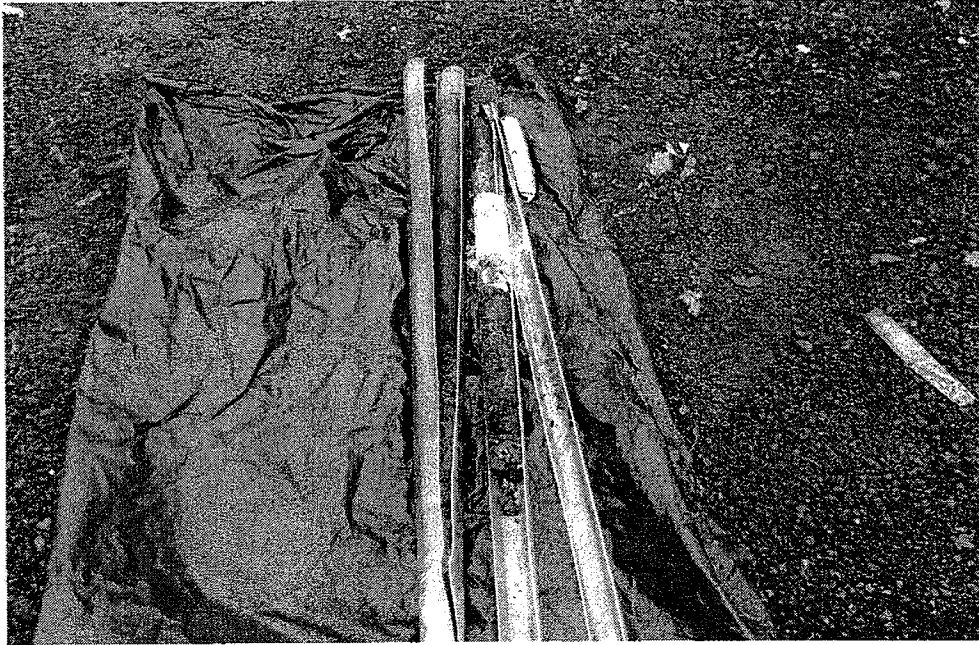




**Soil Boring Samples**



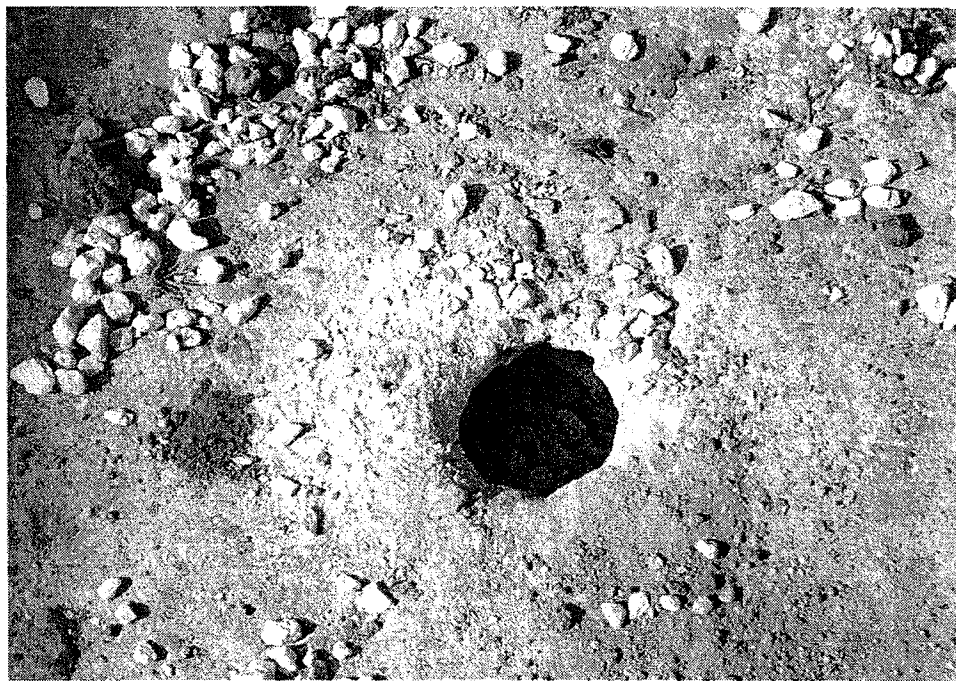
**Soil Boring Samples**



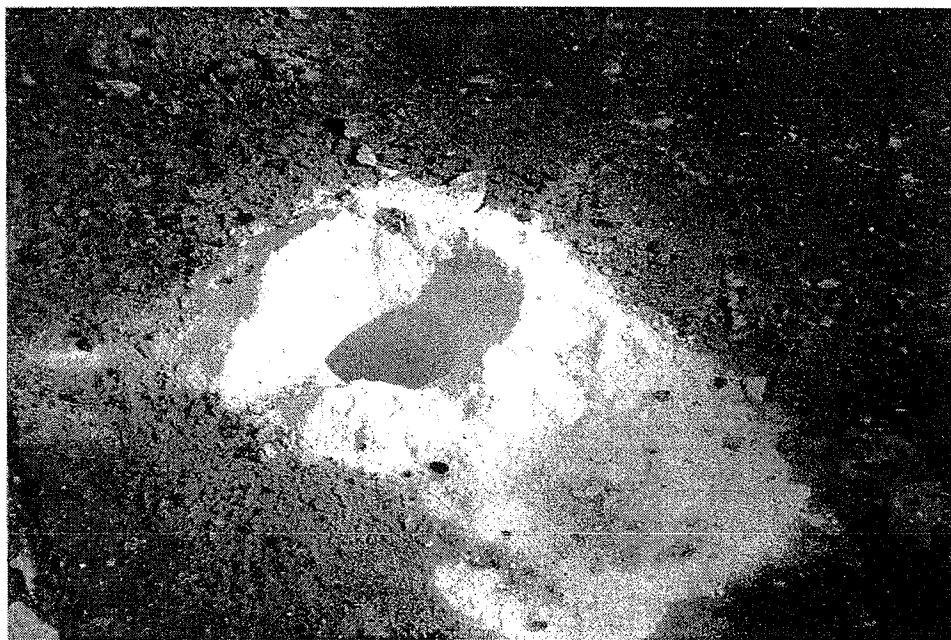
**Soil Boring Samples**



**Soil Boring Samples**



**Soil Boring Holes**



**Soil Boring Holes**



#### 4.0 LABORATORY ANALYTICAL RESULTS

Sample Location	Depth	Analyte	Results	Units	Notes
GP5-1	4'	TPH-DRO	100	mg/kg (ppm)	
GP5-1	4'	TPH-GRO	830	ug/kg (ppm)	
GP5-1	4'	Napthalene	12	ug/kg (ppm)	All other VOCs were ND
GP5-1	9'	TPH-DRO	33	mg/kg (ppm)	
GP5-1	9'	TPH-GRO	220	ug/kg (ppm)	
GP5-1	9'	Napthalene	10	ug/kg (ppm)	All other VOCs were ND

GP5-2	6'	TPH-DRO	36	mg/kg (ppm)	
GP5-2	6'	TPH-GRO	1,700	ug/kg (ppm)	
GP5-2	6'	Acetone	75	ug/kg (ppm)	
GP5-2	6'	1,1-Dichloroethene	36	ug/kg (ppm)	
GP5-2	6'	Carbon Disulfide	40	ug/kg (ppm)	
GP5-2	6'	Toluene	400	ug/kg (ppm)	All other VOCs were ND
GP5-2	9'	TPH-DRO	110	mg/kg (ppm)	
GP5-2	9'	TPH-GRO	760	ug/kg (ppm)	
GP5-2	9'	Acetone	39	ug/kg (ppm)	
GP5-2	9'	1,1-Dichloroethene	32	ug/kg (ppm)	
GP5-2	9'	Toluene	77	ug/kg (ppm)	All other VOCs were ND

GP5-3	3'	TPH-DRO	230	mg/kg (ppm)	
GP5-3	3'	TPH-GRO	480	ug/kg (ppm)	
GP5-3	3'	Acetone	130	ug/kg (ppm)	
GP5-3	3'	MEK	25	ug/kg (ppm)	
GP5-3	3'	Toluene	28	ug/kg (ppm)	
GP5-3	3'	Napthalene	13	ug/kg (ppm)	All other VOCs were ND
GP5-3	6'	TPH-DRO	54	mg/kg (ppm)	
GP5-3	6'	TPH-GRO	3,200	ug/kg (ppm)	
GP5-3	6'	Acetone	360	ug/kg (ppm)	
GP5-3	6'	1,1-Dichloroethene	300	ug/kg (ppm)	
GP5-3	6'	Carbon Disulfide	280	ug/kg (ppm)	
GP5-3	6'	Toluene	320	ug/kg (ppm)	
GP5-3	6'	Ethylbenzene	88	ug/kg (ppm)	
GP5-3	6'	M,p Xylenes	320	ug/kg (ppm)	
GP5-3	6'	O, Xylene	210	ug/kg (ppm)	
GP5-3	6'	Napthalene	77	ug/kg (ppm)	All other VOCs were ND

GP5-4	3'	TPH-DRO	290	mg/kg (ppm)	
GP5-4	3'	TPH-GRO	180	ug/kg (ppm)	
GP5-4	3'	Acetone	52	ug/kg (ppm)	
GP5-4	3'	Methylene Chloride	9	ug/kg (ppm)	
GP5-4	3'	Toluene	9	ug/kg (ppm)	
GP5-4	3'	Napthalene	77	ug/kg (ppm)	All other VOCs were ND
GP5-4	6'	TPH-DRO	80	mg/kg (ppm)	
GP5-4	6'	TPH-GRO	390	ug/kg (ppm)	
GP5-4	6'	Acetone	39	ug/kg (ppm)	
GP5-4	6'	1,1-Dichloroethene	22	ug/kg (ppm)	
GP5-4	6'	Carbon Disulfide	24	ug/kg (ppm)	All other VOCs were ND

GP5-5	3'	TPH-DRO	ND	mg/kg (ppm)	
GP5-5	3'	TPH-GRO	ND	ug/kg (ppm)	
GP5-5	3'	VOCs	ND	ug/kg (ppm)	All VOCs were ND

GP5-6	3'	TPH-DRO	ND	mg/kg (ppm)	
GP5-6	3'	TPH-GRO	ND	ug/kg (ppm)	
GP5-6	3'	VOCs	ND	ug/kg (ppm)	All VOCs were ND

GP5-7	3'	TPH-DRO	ND	mg/kg (ppm)	
GP5-7	3'	TPH-GRO	ND	ug/kg (ppm)	
GP5-7	3'	VOCs	ND	ug/kg (ppm)	All VOCs were ND

GP2-1	9'	TPH-DRO	49	mg/kg (ppm)	
GP2-1	9'	TPH-GRO	ND	ug/kg (ppm)	

GP2-2	9'	TPH-DRO	ND	mg/kg (ppm)	
GP2-2	9'	TPH-GRO	ND	ug/kg (ppm)	

GP2-3	9'	TPH-DRO	ND	mg/kg (ppm)	
GP2-3	9'	TPH-GRO	ND	ug/kg (ppm)	

GP2-4	9'	TPH-DRO	ND	mg/kg (ppm)	
GP2-4	9'	TPH-GRO	ND	ug/kg (ppm)	

GP2-5	9'	TPH-DRO	ND	mg/kg (ppm)	
GP2-5	9'	TPH-GRO	ND	ug/kg (ppm)	

GP2-6	9'	TPH-DRO	ND	mg/kg (ppm)	
GP2-6	9'	TPH-GRO	ND	ug/kg (ppm)	

GP2-7	9'	TPH-DRO	ND	mg/kg (ppm)	
GP2-7	9'	TPH-GRO	ND	ug/kg (ppm)	

## 5.0 RECOMMENDATIONS AND CONCLUSIONS

Based on the above laboratory results, it appears that subsurface soils in the vicinity of the former gasoline UST (GP2) are minimally impacted with petroleum hydrocarbons. All samples collected from this location were below the DDOE Tier 0 RBC for TPH of 100 mg/kg as referenced as follows: [http://doh.dc.gov/doh/cwp/view,A,1374,Q,585847,dohNav\\_GID,1813.asp](http://doh.dc.gov/doh/cwp/view,A,1374,Q,585847,dohNav_GID,1813.asp). Based on the laboratory results, it is not anticipated that soils from the area around the former gasoline UST will require special handling or disposal.

Laboratory results from the area around the trash loading pit and built up area south of the main building (GP5) exhibited levels of petroleum hydrocarbons and volatile organic compounds (VOCs) above the DDOE Tier 0 RBC. This area visually appears to be built up from the surrounding the areas, and was evidenced by soil borings containing various fill items such as brick, wood, trash, etc. Based on laboratory analysis and visual observations the fill area appears to be approximately 6,000 square feet in size. Laboratory analysis indicated contamination up to 9' feet deep for a volume of approximately 2,000 cubic yards, or 3,500 tons. This material should be removed and properly disposed at an approved facility such as Soil Safe, Inc in Brandywine, Maryland. The cost to remove, load, transport, and properly dispose of this material is \$61.00 per ton for a total of approximately \$213,500.00. It is estimated that the excavation, loading, and transport of the contaminated material will be accomplished in 2-3 weeks.

Groundwater was not encountered in samples up to 12' feet deep; therefore, it is not anticipated that groundwater will be encountered during removal of the aforementioned 2,000 cubic yards. In the event that groundwater is encountered during excavation, a portable 20,000-gallon frac should be used to contain and store the water until laboratory testing confirms disposal requirements. Dewatering can occur directly from the excavation via the usage of trash and/or submersible pumps. The cost to erect and maintain dewatering controls during excavation would be \$7,500.00. If the water collected requires disposal as petroleum contaminated, disposal would be \$0.80 per gallon.

An Environmental Health and Safety Plan should be prepared including a description of the environmental construction oversight activities necessary during excavation. The estimate to prepare the Plan should not exceed \$25,000.

In the event the site should be enrolled in the DDOE Voluntary Cleanup Program (VCP) to obtain regulatory approval of the remedial activities which will be completed, a Corrective Action Plan (CAP) will be prepared and submitted to the DDOE for approval. Upon successful implementation of the CAP and site redevelopment, a Certificate of Completion will be provided by the DDOE. The estimated costs to enter the VCP, prepare a CAP, and provided a CAP Implementation Report is roughly \$25,000, including the VCP application fee of \$10,000.



CEC Environmental, Inc. thanks you for the opportunity to assist you with your project. Please call me directly if you have any questions at (202-895-1710, or on my cell phone 240-350-7643.

Regards,



Gary Carroll  
President and CEO  
CEC Environmental, Inc.

